

## CLAIMS

1. A device for detecting arterial pressure with high measurement precision, comprising a cuff with inflatable chamber, adapted to be placed around the arm of a patient, means for introducing air to inflate said cuff,  
5 and decompression means adapted to decompress said inflatable chamber, characterized in that it comprises means adapted to detect and store all the sphygmie pulses generated by the arterial pulsation and to identify the pulses that correspond to the appearance and disappearance of the wrist beat, detected by means of a technique for detecting sphygmie pulses  
10 generated by arterial pressure that provides for the intervention and subjective judgment of an operator.

2. The device according to claim 1, characterized in that said decompression means of said inflatable chamber comprise a valve for providing constant and time-controlled decompression.

15 3. The device according to claim 1, characterized in that it comprises discharge means adapted to completely and instantaneously discharge the inflatable chamber of said cuff.

4. The device according to one or more of the preceding claims, characterized in that said means for detecting and storing the sphygmie  
20 pulses are connected to data storage means, which are adapted to store the chart of the sphygmie pulses.

5. The device according to one or more of the preceding claims, characterized in that it comprises a display that is adapted to display the detected levels of pressure and the levels of sphygmie intensity of the  
25 pulsations.

6. The device according to one or more of the preceding claims, characterized in that it comprises a button that is adapted to be pressed by the operator when the operator detects sphygmie pulses that correspond to the systolic or diastolic pressure.

30 7. A method for detecting arterial pressure, comprising the steps of:

pumping air into a cuff provided with an inflatable chamber;

decompressing said inflatable chamber;

detecting, by means of the intervention and subjective judgment of an operator, the sphygmie pulses that correspond respectively to the appearance and disappearance of the wrist beat,

characterized in that it comprises the steps of:

detecting and storing all the sphygmie pulses generated by arterial pulsation by using an electronic sensing and storage circuit;

identifying, among said sphygmie pulses, the ones that correspond to the appearance and disappearance of the pulse beat, detected by means of said stethoscope.

8. The method according to claim 7, characterized in that said step of performing the decompression of said inflatable chamber comprises the execution of decompression at a controlled and constant rate.

9. The method according to one or more of claims 7 and 8, characterized in that it comprises a step of storing said sphygmie pulses generated by arterial pulsation, in order to allow subsequent analysis of the chart of sphygmie pulses, in order to determine assuredly the pulses that actually correspond to the maximum and minimum values of arterial pressure.

10. The method according to claim 7, characterized in that it comprises a step of pressing, on the part of said operator, a button when sphygmie pulses that correspond to systolic and diastolic pressure are detected, said sphygmie pulses that correspond to systolic and diastolic pressure being "marked" on a digital scale of said device.